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EXAMINER

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ART UNIT	PAPER NUMBER
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2171

DATE MAILED: 09/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/931,209	Applicant(s) WYSS ET AL.	
	Examiner Etienne P LeRoux	Art Unit 2171	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 17-43 and 45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 17-43 and 45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

Finality Withdrawn

In view of the Appeal Brief filed on May 12, 2004, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Status of the Claims:

Claims 1-11, 17-43 and 45 are pending. Claims 12-16 and 44 are cancelled. Claims 1-11, 17-43 and 45 are rejected in this office action.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 36-40 and 45 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 36 recites “defining an absolute threshold limit that is universally applicable to all received questions and selecting the question-answer sets with scores above the absolute threshold limit.” The specification does not enable the skilled artisan to make an absolute threshold limit that is universally applicable to all questions.

Claims 37-40 include the term “reflexive index.” The specification does not enable the skilled artisan to make and use a reflexive index in context of the invention, i.e., a knowledge-based system and method. The specification provides the following non-enabling disclosure:

In stage 2606, a temporary “reflexive” index (answer candidate index) is created. This temporary index includes the original question and either all of the Q/A entries in the database 108 or only the results generated in stage 2604. In one embodiment, the temporary reflexive index includes the original question and all of the Q/A entries in the database 108. In stage 2608, the temporary index, which now contains the original question, is queried using each of the question fields from the candidate answers from stage 2604, and in stage 2610, the results from this query are correlated and graded with respect to the original question. This correlation can also use dynamic thresholding. In stage 2612, only those candidate entries that, when queried against the temporary reflexive index, hit the original question are included in the response. Thus, this technique helps to reduce the number of “false positive” results returned by eliminating candidate Q/A entries that do not “reflexively” (“symmetrically”) match the question.

The above excerpt from the specification does not enable the skilled artisan to make and use a reflexive index. Furthermore, the drawings provide no further enlightenment because Figure 26, stage 2606 merely shows a step labeled “Create Answer Candidate Index” which per the above excerpt from the specification is the same thing as reflexive index. Furthermore, the above

excerpt from the specification states that “candidate Q/A entries [.] ‘reflexively’ (symmetrically) match the question.” The skilled artisan would not know how to make and use a reflexive index based on matching symmetrically a question to a Q/A entry.

Claim 45 recites “sending the answer from the knowledge base system to the client computer before said receiving the message from the client computer.” The specification does not enable the skilled artisan to send an answer before receiving the question.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 37-40 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Where applicant acts as his or her own lexicographer to specifically define a term of a claim, the written description must clearly define the claim term and set forth so as to put one reasonably skilled in the art on notice that the applicant intended to define that claim term.

Process Control Corp. v. HydReclaim Corp., 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). In instant situation, applicant includes reflexive index in claims 37-40. The term is indefinite because the specification does not clearly redefine the term. Figure 26, Step 2606 includes Answer Candidate Index. The specification suggests that Answer Candidate Index is the same thing as Temporary Reflexive Index. It is unclear what comprises an actual Reflexive Index and it is unclear what comprises Answer Candidate Index. Furthermore the specification suggests that reflexively is the same thing as symmetrically but once again fails to specifically

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define Reflexive Index. Furthermore, Reflexive Index is indefinite because Reflexive Index is not common in the art pertaining to knowledge-based systems. The specification fails to specifically define Reflexive Index and it is not well-known in the prior art thus Reflexive Index is indefinite.

Prior Art Rejection Precluded

Claims 36-40 and 45 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement and are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Prior art rejection is not possible due to lack of enablement and indefiniteness of above claims.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 8, 10, 11, 17, 20, 24, 27, 28, 32 and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat No 5,517,405 issued to McAndrew et al (hereafter McAndrew)

Claim 1:

McAndrew '405 discloses:

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- operating a knowledge-base system [Fig 1, 40] configured to store in a database [Fig 1, 42] containing answers to questions,
- the knowledge-base system being operatively coupled to a client computer [Fig 1, 10];
- receiving a message from the client computer [user requests case be referred to a more experienced reviewer such as a physician, col 8, lines 27-37]
- determining the message from the client computer was a reply to a previously generated message [inherent because the user is on-line with an inference engine which dynamically generates questions on the basis of user's responses to previous inference questions in order to investigate a health problem and proposed solution, col 6, lines 47-58 and col 8, lines 4-17]
- forwarding the message from the client computer to a representative in response to said determining [user refers case to a more experienced reviewer such as a physician, col 8, lines 27-34]

Claim 2:

McAndrew discloses wherein the message from the client computer is an email [col 6, lines 29-35]

Claim 8:

McAndrew '405 discloses a network [Fig 1 and col 6, line 32]

Claim 10:

McAndrew '405 discloses a human being [col 8, lines 30-37]

Claim 11:

McAndrew '405 discloses the representative is an automated system [col 8, lines 17-26]

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Claim 17:

McAndrew discloses:

operating a system [Fig 1, 40] configured with a database [Fig 1, 42] including a plurality of question-answer sets receiving a query input to the system, the query input including a word selecting one or more of the question-answer sets with the system in response to the query input by evaluating presence of the word in one or more answers of the question-answer sets differently than presence of the word in one or more questions of the question-answer sets and providing an output from the system based on said selecting [col 6, lines 2-18, information provided in the problem statement is used to index questions or question categories maintained in a database, col 6, lines 2-18]

Claim 20:

McAndrew discloses a word index [col 6, lines 1-13]

Claim 24:

McAndrew discloses alerting a representative when a particular one of the question-answer sets is included in the output [system refers case to a physician col 8, liners 28-37].

Claim 27:

McAndrew discloses designating one or more of the question-answer sets to always appear in the output for the query input [user demographic data, defining the problem and a proposed solution, col 6, lines 47-52].

Claim 28:

McAndrew discloses designating one of the question-answer sets to never appear in the output for the query input [user overrides proposed treatment, col 8, lines 1-3].

Claim 32:

McAndrew discloses:

- receiving a message from the client computer [user requests case be referred to a more experienced reviewer such as a physician, col 8, lines 27-37]
- determining the message from the client computer was a reply to a previously generated message [inherent because the user is on-line with an inference engine which dynamically generates questions on the basis of user's responses to previous inference questions in order to investigate a health problem and proposed solution, col 6, lines 47-58 and col 8, lines 4-17]
- forwarding the message from the client computer to a representative in response to said determining [recommendation by the inference engine to refer the case to a more experienced reviewer such as a physician, col 8, lines 27-34]

Claim 45:

McAndrew '405 discloses wherein the previously generated message includes an answer to a question from the client computer, sending the answer from the knowledge-base system to the client computer before said receiving the message from the client computer [col 7, lines 45-57].

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over McAndrew in view of US Pat No 5,619,697 issued to Nishida.

Claim 3:

McAndrew discloses the elements of claim 1 as noted above.

McAndrew discloses a user interaction file [col 4, lines 5-18] but is silent regarding a message identification number on all communications sent by the knowledge-base system; and wherein said determining includes searching the message from the client computer for the message identification number.

Nishida discloses enclosing a message identification number on all communications sent by the knowledge-base system; and wherein said determining includes searching the message from the client computer for the message identification number [col 12, lines 1-28].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify McAndrew to include enclosing a message identification number on all communications sent by the knowledge-base system; and wherein said determining includes

searching the message from the client computer for the message identification number as taught by Nishida for the purpose of collecting system initiated questions and user provided responses on a user interaction file. The ordinarily skilled artisan would have been motivated to modify McAndrew's invention for the purpose of improving McAndrew's invention by providing a means of grouping questions and answers so that a computer-based decision tool enables users to decide whether to accept or reject a proposed solution to a problem [col 2, lines 35-40].

Claim 4:

Nishida discloses wherein said forwarding includes attaching message history information ["0" for a request type, "1" for a response type, col 12, lines 1-10].

Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over McAndrew in view of US Pat No 6,557,036 issued to Kavacheri et al (hereafter Kavacheri).

Claim 5:

McAndrew discloses the limitations of claim 1 as noted above.

Furthermore, McAndrew discloses maintaining a communication log of communications sent and received with the knowledge-base system [user interaction file from a previous session, col 6, lines 46-58]

McAndrew fails to disclose determining includes ascertaining with the communication log whether a reply detection limit has been exceeded for the client computer.

Kavacheri discloses determining whether a reply detection limit has been exceeded for the client computer [claim 7]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify McAndrew to include determining whether a reply

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detection limit has been exceeded for the client computer as taught by Kavacheri for the purpose of providing a message server performance parameter monitor [claim 1]. It would have been obvious to the ordinarily skilled artisan to improve McAndrew's invention to include determining whether a reply detection limit has been exceeded for the purpose of monitoring whether components of the system are operating so that security of the messaging system can be provided [col 8, lines 52-65]. Furthermore, examiner maintains that a communication log is inherent in the disclosure of Kavacheri since a communication log is inherent in Kavacheri's email performance parameter monitor [claim 7] because Kavacheri provides an error notification when a measured response time exceeds the threshold value response time [claim 7]

Claim 6:

McAndrew discloses the elements of claims 1 and 5 as noted above.

McAndrew fails to disclose wherein the reply detection limit includes a communication interval limit of time intervals between successive communications with the client computer and a number of communications limits based on a number of communications with the client computer.

Examiner maintains above limitation is inherent in the disclosure of Kavacheri as discussed above in the rejection of claim 5.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of McAndrew and Kavacheri and further in view of US Pat No 5,937,390 issued to Hyodo, as best examiner is able to ascertain.

Claim 7:

The combination of McAndrew and Kavacheri disclose the elements of claims 1 and 5 as noted above.

Furthermore, McAndrew discloses a log of email communications [McAndrew discloses a user interaction file, col 4, lines 5-18] and web chatting [col 6, lines 30-35].

The combination of McAndrew and Kavacheri fails to disclose a log of telephone conversations and personal conversations.

Hyodo discloses a log of telephone conversations and personal conversations [col 5, lines 40-50].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of McAndrew and Kavacheri to include a log of telephone conversations and personal conversations as taught by Hyodo for the purpose of determining the ratio of the telephone calls versus the number of accesses to the WWW Server. It would have been obvious to the ordinarily skilled artisan to improve the invention of McAndrew and Kavacheri to include a log of telephone conversations and personal conversations in order to analyze the effectiveness of on-line advertising during any desired time period, in particular a seasonal time period [col 5, lines 25-49].

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of McAndrew and Nishida and further in view of Kavacheri.

Claim 9:

McAndrew discloses the elements of claim 1 as noted above.

McAndrew fails to disclose enclosing a message identification number on all communications sent by the knowledge-base system.

McAndrew discloses a user interaction file [col 4, lines 5-18] but is silent regarding a message identification number on all communications sent by the knowledge-base system; and wherein said determining includes searching the message from the client computer for the message identification number.

Nishida discloses enclosing a message identification number on all communications sent by the knowledge-base system; and wherein said determining includes searching the message from the client computer for the message identification number [col 12, lines 1-28].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify McAndrew to include enclosing a message identification number on all communications sent by the knowledge-base system; and wherein said determining includes searching the message from the client computer for the message identification number as taught by Nishida for the purpose of collecting system initiated questions and user provided responses on a user interaction file. The ordinarily skilled artisan would have been motivated to modify McAndrew's invention for the purpose of improving McAndrew's invention by providing a means of grouping questions and answers so that a computer-based decision tool enables users to decide whether to accept or reject a proposed solution to a problem [col 2, lines 35-40].

McAndrew discloses maintaining a communication log of communications sent and received with the knowledge-base system [user interaction file col 6, lines 47-58].

McAndrew fails to disclose determining includes ascertaining with the communication log whether a reply detection limit has been exceeded for the client computer.

Kavacheri discloses determining whether a reply detection limit has been exceeded for the client computer [claim 7]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify McAndrew to include determining whether a reply detection limit has been exceeded for the client computer as taught by Kavacheri for the purpose of providing a message server performance parameter monitor [claim 1]. It would have been obvious to the ordinarily skilled artisan to improve McAndrew's invention to include determining whether a reply detection limit has been exceeded for the purpose of monitoring whether components of the system are operating so that security of the messaging system can be provided [col 8, lines 52-65]. Furthermore, examiner maintains that a communication log is inherent in the disclosure of Kavacheri since a communication log is inherent in Kavacheri's email performance parameter monitor [claim 7] because Kavacheri provides an error notification when a measured response time exceeds the threshold value response time [claim 7]

Claims 18, 19 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over McAndrew in view of US Pat No 6,547,727 issued to Hashiguchi et al (hereafter Hashiguchi), as best examiner is able to ascertain.

Claims 18 and 25:

McAndrew discloses the elements of claim 17 as noted above.

McAndrew fails to disclose wherein said evaluating includes weighting the answers more than the questions.

Hashiguchi discloses weighting of questions and answers [claim 14].

It would have been obvious to the ordinarily skilled artisan to modify McAndrew's invention to include weighting of questions and answers so that the value of a risk of the checkup receiver's suffering from the disease. The ordinarily skilled artisan would have been motivated to improve McAndrew's invention by weighting the questions and answers to provide a health checkup supporting method [claim 14].

Claim 19:

McAndrew discloses the elements of claim 17 as noted above.

McAndrew fails to disclose wherein said evaluating includes weighting the answers more than the questions.

Hashiguchi discloses weighting of questions and answers [claim 14].

It would have been obvious to the ordinarily skilled artisan to modify McAndrew's invention to include weighting of questions and answers so that the value of a risk of the checkup receiver's suffering from the disease. The ordinarily skilled artisan would have been motivated to improve McAndrew's invention by weighting the questions and answers to provide a health checkup supporting method [claim 14].

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over McAndrew in view of US Pat No 5,870,740 issued to Rose et al (hereafter Rose), as best examiner is able to ascertain.

Claim 21:

McAndrew discloses the elements of claim as noted above.

McAndrew fails to disclose wherein said selecting includes scoring a length of one of the questions in proportion to a length of the query input.

Rose discloses scoring a length of one of the questions in proportion to a length [col 7, lines 10-30].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify McAndrew to include scoring a length of one of the questions in proportion to a length for the purpose of adjusting the relevance ranking score of a document having a high overlap when the query is short. The ordinarily skilled artisan would have been motivated to include the above for purpose of improving McAndrew's invention so that more accurate search results can be obtained for a short query [col 7, lines 10-15].

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over McAndrew in view of Pub No US 2002/0049752 issued to Bowman et al (hereafter Bowman), as best examiner is able to ascertain.

Claim 22:

McAndrew discloses the elements of claim 17 as noted above.

McAndrew fails to disclose wherein said selecting includes scoring the question-answer sets to create a distribution of scores and determining the query result based upon variability of the scores.

Bowman discloses wherein said selecting includes scoring the question-answer sets to create a distribution of scores and determining the query result based upon variability of the scores [paragraph 18].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify McAndrew to include wherein said selecting includes scoring the question-answer sets to create a distribution of scores and determining the query result based upon variability of the scores as taught by Bowman for the purpose of ranking a query result(s). The ordinarily skilled artisan would have been motivated to improve the invention of McAndrew by including the above so that the user can select query result(s) having top ranking values which represent the query result(s) which most closely relate to the search term [paragraph 38].

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over McAndrew in view of US Pat No 5,278,980 issued to Pedersen et al (hereafter Pedersen).

Claim 23:

McAndrew discloses the elements of claim 17 as noted above.

McAndrew fails to disclose designating one or more words to ignore.

Pedersen discloses one or more words to ignore [col 11, lines 42-50]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify McAndrew to include one or more words to ignore as taught by Pedersen for the purpose of ignoring words that are not content words of a document [col 11, lines 42-50]. The ordinarily skilled artisan would have been motivated to improve the invention of McAndrew by including the above so that the search can be performed expeditiously by excluding words which would cause the search engine to hang up, for example words assigned as Boolean operators i.e., AND is a stop word and would cause the search engine to produce a null result.

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4. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over McAndrew in view of US Pat No 6,023,670 issued to Martino et al (hereafter Martino).

Claim 26:

McAndrew discloses the elements of claim 17 as noted above.

McAndrew fails to disclose defining aliases for at least one word.

Martino discloses defining aliases for at least one word [col 7, lines 17-37].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify McAndrew to include defining aliases for at least one word as taught by Martino for the purpose of improving correlation scores [col 7, line 23]. The ordinarily skilled artisan would have been motivated to improve McAndrew's invention per the above so that separation between languages is improved by alias removal [col 7, line 28].

5. Claims 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over McAndrew in view of US Pat No 6,553,364 issued to Wu (hereafter Wu, as best examiner is able to ascertain).

Claim 29:

McAndrew discloses the elements of claim 17 as noted above.

McAndrew fails to disclose proportionally weighting one of the question-answer sets to reduce likelihood of appearing in the output for the query input.

Wu discloses proportionally weighting one of the question-answer sets to reduce likelihood of appearing in the output for the query input [col 6, lines 55-60].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify McAndrew to include proportionally weighting one of the question-answer sets to reduce likelihood of appearing in the output for the query input as taught by Wu for the purpose of displaying documents [col 6, line 55-60]. The ordinarily skilled artisan would have been motivated to improve the invention of McAndrew by including the above for the purpose of first displaying documents that are the most interest [col 6, lines 55-60].

Claim 30:

McAndrew discloses the elements of claim 17 as noted above.

McAndrew fails to disclose proportionally weighting one of the question-answer sets to increase likelihood of appearing in the output for the query input.

Wu discloses proportionally weighting one of the question-answer sets to increase likelihood of appearing in the output for the query input [col 6, lines 55-60].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify McAndrew to include proportionally weighting one of the question-answer sets to increase likelihood of appearing in the output for the query input as taught by Wu for the purpose of displaying documents [col 6, line 55-60]. The ordinarily skilled artisan would have been motivated to improve the invention of McAndrew by including the above for the purpose of first displaying documents that are the most interest [col 6, lines 55-60].

Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over McAndrew in view of US Pat 6,711,585 issued to Copperman et al (hereafter Copperman, as best examiner is able to ascertain.

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Claim 31:

McAndrew discloses the elements of claim 17 as noted above.

McAndrew fails to disclose adding a question-answer set to the database by email.

Copperman discloses adding a question-answer set to the database by email [col 40, lines 59-67]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify McAndrew to include adding a question-answer set to the database by email as taught by Copperman for the purpose of adding taxonomy tags to the user's question [col 40, line 64]. The ordinarily skilled artisan would have been motivated to modify McAndrew's invention per the above for the purpose of improving the invention by improving the business context of the interaction by creating user profiling in order to assist with retrieval [col 40, line 59].

Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of McAndrew and Copperman in view of US Pat 6,760,727 issued to Schroeder et al (hereafter Schroeder), as best examiner is able to ascertain.

Claim 33:

The combination of McAndrew and Copperman discloses the elements of claims 17 and 32 as noted above.

The combination of McAndrew and Copperman fail to disclose creating a response message based on the message from the client computer, at least one of a number of response templates and the selected one or more sets, the system being configured to store the response

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template each providing a different response format, and wherein said providing the output includes sending the response to the client computer.

Schroeder discloses creating a response message based on the message from the client computer, at least one of a number of response templates and the selected one or more sets, the system being configured to store the response template each providing a different response format, and wherein said providing the output includes sending the response to the client computer [col 20, lines 13-30].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of McAndrew and Copperman to include creating a response message based on the message from the client computer, at least one of a number of response templates and the selected one or more sets, the system being configured to store the response template each providing a different response format, and wherein said providing the output includes sending the response to the client computer as taught by Schroeder for the purpose of providing a database of templates configured to provide suggestions or recommendations to assist the user in making an accurate response [col 20, line 20-22]. The ordinarily skilled artisan would have been motivated to improve the invention of McAndrew and Copperman so that templates can be created to meet the needs of a particular client's business [col 20, lines 25-30].

Claims 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over McAndrew in view of US Pat No 6,443,840 issued to Von Kohorn (hereafter Von Kohorn) and

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further in view of US Pat No 6,270,456 issued to Iliff (hereafter Iliff) as best examiner is able to ascertain.

Claim 34:

McAndrew discloses operating a knowledge-base system [Fig 1, 40] configured to store a database [Fig 1, 42] formatted with a number of question-answer sets, the knowledge-base system being operatively coupled to a client computer [Fig 1, 10], receiving an input corresponding to a question from the client computer [assisting the user in making an informed decision about a problem, col 2, lines 64-67].

McAndrew fails to disclose scoring the question-answer sets with respect to the question.

Von Kohorn discloses scoring the question-answer sets with respect to the question [col 3, lines 50-65].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify McAndrew to include scoring the question-answer sets with respect to the question as disclosed by Von Kohorn for the purpose of assisting a college professor to conduct an examination [col 3, line 55]. The ordinarily skilled artisan would have been motivated to improve McAndrew's invention by incorporating the above so that a college professor can set an examination procedure which requires a limited time is for responses [col 3, lines 55-65].

The combination of McAndrew and Von Kohorn disclose the limitation of the invention as noted above.

The combination of McAndrew and Von Kohorn fails to disclose determining a threshold limit based upon said scoring and selecting the question-answer sets with scores above the threshold limit.

Iliff discloses determining a threshold limit based upon said scoring and selecting the question-answer sets with scores above the threshold limit [col 17, lines 1-16].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of McAndrew and Von Kohorn to include determining a threshold limit based upon said scoring and selecting the question-answer sets with scores above the threshold limit as taught by Iliff for the purpose of determining if a patient has the symptom of depression [col 17, line 16]. The ordinarily skilled artisan would have been motivated to improve the invention of McAndrew and Von Kohorn per the above so that a physician can use questions stored in a database to accurately determine if a patient has a particular symptom [col 17, lines 1-16].

Claim 35:

The combination of McAndrew, Von Kohorn and Iliff disclose the elements of claim 34 as noted above.

Iliff discloses calculating variability of scores from said scoring and basing the threshold limit on the variability of the scores [col 17, lines 1-16].

6. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over McAndrew in view of Schroeder.

Claim 41:

McAndrew discloses means for determining a message from a client computer was a reply to a previously generated message from a FAQ [col 6, lines 5-8 describes indexing various questions or question categories which reads on FAQ] database and forwarding the message to a

representative in response, means for evaluating question components and answer components of the FAQ database independently relative to an input query [col 6, lines 1-10].

McAndrew fails to disclose means for providing a response to the FAQ database query in accordance with one or more response templates, the response templates each relating to a different response format.

Schroeder discloses means for providing a response to the FAQ database query in accordance with one or more response templates, the response templates each relating to a different response format [col 20, lines 13-30].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify McAndrew to include means for providing a response to the FAQ database query in accordance with one or more response templates, the response templates each relating to a different response format as taught by Schroeder for the purpose of providing a database of templates configured to provide suggestions or recommendations to assist the user in making an accurate response [col 20, line 20-22]. The ordinarily skilled artisan would have been motivated to improve the invention of McAndrew so that templates can be created to meet the needs of a particular client's business [col 20, lines 25-30].

Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of McAndrew and Schroeder and further in view of Pedersen..

Claim 42:

The combination of McAndrew and Schroeder discloses the elements of claim 41 as noted above.

The combination of McAndrew and Schroeder fails to disclose designating one or more words to ignore.

Pedersen discloses one or more words to ignore [col 11, lines 42-50]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of McAndrew and Schroeder to include one or more words to ignore as taught by Pedersen for the purpose of ignoring words that are not content words of a document [col 11, lines 42-50]. The ordinarily skilled artisan would have been motivated to improve the invention of the combination of McAndrew and Schroeder by including the above so that the search can be performed expeditiously by excluding words which would cause the search engine to hang up, for example words assigned as Boolean operators i.e., AND is a stop word and would cause the search engine to produce a null result.

7. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of McAndrew and Schroeder and further in view of Martino.

Claim 43:

The combination of McAndrew and Schroeder discloses the elements of claim 41 as noted above.

The combination of McAndrew and Schroeder fails to disclose defining aliases for at least one word.

Martino discloses defining aliases for at least one word [col 7, lines 17-37].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of McAndrew and Schroeder to include defining aliases for

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at least one word as taught by Martino for the purpose of improving correlation scores [col 7, line 23]. The ordinarily skilled artisan would have been motivated to improve the combination invention of McAndrew and Schroeder per the above so that separation between languages is improved by alias removal [col 7, line 28].

Response to Arguments

Applicant's arguments filed May 12, 2004, have been fully considered but they are not persuasive.

Applicant Argument No 1:

Applicant states on page 11 "McAndrew fails to disclose 'determining the message from the client computer was a reply to a previously generated message from the knowledge-base system' and 'forwarding the message from the client computer to a representative in response to said determining.'"

Examiner Response No 1:

McAndrew discloses in col 8, lines 4-37 the following:

A less experienced user can interact with the inference engine 40 in the structured mode 22. In this mode, specific questions are presented to the user by the system. **The questions guide the user through the decision making process in a very structured way, and are generated dynamically by the inference engine 40 on the basis of the user's responses to previous questions.** It should be appreciated that in the structured mode, the questions are presented, e.g., one at a time, in response to the user's previous answers, whereas in the guided mode, a complete questionnaire is initially generated and presented to the user on the basis of the initial problem and proposed treatment information input by the user. The operation of the inference engine 40 is guided at all times by rules stored in database 42.

In addition to providing a recommendation as to whether or not to accept a proposed solution to a problem, inference engine 40 can also be provided with

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rules to enable it to suggest alternative solutions (e.g., medical treatments or care options). In medical applications, the expert system can also access information concerning insurance policy coverage ("insurance information " 48) from database 42 or via router 12 from database 14, to make a determination as to whether a proposed treatment is covered by a particular patient's medical insurance policy.

The inference engine can also provide an explanation of the logic it used to make a particular recommendation and/or to suggest alternatives to a proposed solution. **This is particularly helpful in the event that a recommendation was made by the system or the user to refer the case to a more experienced reviewer, such as a physician, to make a final decision as to whether the proposed treatment should be certified or not.** By having an explanation as to why the case was referred, the reviewer will be able to more quickly focus on the relevant issues that must be addressed to arrive at a final decision.

Regarding the claim limitation "determining the message from the client computer was a reply to a previously generated message from the knowledge-base system" examiner maintains that McAndrew's disclosure reads on the claim language for the reasons given below:

McAndrew discloses that the system dynamically generates questions in response to a users previous response. McAndrew discloses that during this process of question and answer, the user can make a recommendation that the case be reviewed by a more experienced reviewer such as a physician. McAndrew's disclosure of a recommendation by the user reads on the claim limitation "the message from the client computer." Furthermore, McAndrew's disclosure that this recommendation by the user comes after the system previously submitted a question to the user reads on the claim limitation "the message from the client computer was a reply to a previously generated message from the knowledge system."

Applicant Argument No 2:

Applicant argues on page 11 regarding claims 3 and 4 that McAndrew fails to disclose “enclosing a message identification number on all communications sent by the knowledge-base system.”

Examiner Response No 2:

Examiner is partially persuaded. Examiner maintains that McAndrew inherently discloses a message identification number by virtue of the user interaction file. However, in order to reduce unnecessary arguments, examiner provides supra new art rejection over McAndrew in view of Nishida.

Applicant Argument No 3:

Applicant argues on page 12 regarding claim 5 that McAndrew fails to disclose “wherein said determining includes ascertaining with the communication log whether a reply detection limit has been exceeded for the client computer.”

Examiner Response No 3:

Examiner maintains that a reply detection limit is inherent is McAndrew’s disclosure of a user interaction file. However, in order to reduce unnecessary arguments, examiner provides supra new art rejection over McAndrew in view of Kavacheri.

Applicant Argument No 4:

Applicant states on page 12 regarding claim 6 that McAndrew fails to disclose “wherein the reply detection limit includes a communication time interval limit of time intervals between successive communications with the client computer and a number of communications based on a number of communications with the client computer.”

Examiner Response No 4:

Examiner maintains that a time interval between successive communications is inherent in McAndrew's user interaction file but in order to reduce unnecessary arguments, examiner provides supra new art rejection over McAndrew in view of Kavacheri.

Applicant Argument No 5:

Applicant states on page 13 with regard to claim 9 that McAndrew fails to disclose "wherein said determining includes searching the message from the client computer for the message identification number and ascertaining with the communication log whether a reply detection limit has been exceeded for the client computer."

Examiner Response No 5:

Examiner is not persuaded. Examiner provides supra new art rejection over the combination of McAndrew and Nishida and Applicant is referred to supra response regarding claims 3-5.

Applicant Argument No 6:

Applicant states on page 13 with regard to claim 10 that McAndrew fails to disclose "the representative is a human being."

Examiner Response No 6:

Examiner is not persuaded. Examiner maintains that a physician taught by McAndrew is a human being.

Applicant Argument No 7:

Applicant states on page 13 with regard to claim 17 that McAndrew fails to disclose "receiving a query input to the system, the query input including a word and selecting one or more of the question-answer sets with the system in response to the query input by evaluating

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presence of the word in one or more answers of the question-answer sets differently than presence of the word in one or more questions of the question answer sets.”

Examiner Response No 7:

Examiner is not persuaded. Examiner maintains that McAndrew’s disclosure that questions are indexed according to user input reads on above limitation [col 6, lines 2-18]. For further discussion, refer supra office action. In particular, McAndrew teaches the following in column 5, line 60 through column 6, line 17:

A particular advantage of the system disclosed herein is that different user levels are accommodated. For example, a beginning user will need more structure in order to effectively interact with the expert system. In such a case, the system generates a questionnaire "on the fly," as the user is responding to previously asked questions. If the user asks for a recommendation from the expert system before all of the necessary information has been determined, the system will generate additional questions until all necessary information has been obtained. For more advanced users, a guided mode of operation is provided in which a predefined form is dynamically created based on an initial problem statement (e.g., medical diagnosis and proposed treatment) entered by the user. **Information provided in the problem statement is used to index various questions or question categories maintained in a database.** The appropriate questions are then retrieved and assembled into a questionnaire for display to the user. The advanced user then completes those areas of the questionnaire that he or she knows are necessary to obtain a recommendation from the system as to the validity of a proposed solution. In applications where the system is used for managing health care, a "problem" to be solved can comprise a medical condition or diagnosis for which it is necessary to find a treatment, and the solution to be assessed can comprise a proposed treatment for the medical condition.

Applicant Argument No 8:

Applicant states on page 16 with regard to claim 24 that McAndrew fails to disclose “alerting a representative when a particular one of the question-answer sets is included in the output.”

Examiner Response No 8:

Examiner maintains that McAndrew's request of a user initiated request to refer the case to a physician reads on above limitation.

McAndrew discloses in col 2, lines 35-55 the following:

The invention provides a computer-based decision support tool for enabling users to decide whether to accept or reject a proposed solution to a problem. For example, in the health care field the decision tool can be used to recommend whether or not to accept a proposed treatment for a given medical condition. Four decision making models are provided for fostering appropriate decision making by users. In a specific embodiment, the decision making process will determine if proposed health care or care already delivered is the correct intervention and level of quality. It also allows a user to monitor the appropriateness of the amount of resources expended. **Based upon the user, some of the decisions will cause cases to be referred to a higher level of authority, for example from a nurse to a physician, rather than allowing the ultimate decision to be made at the lower level.** A decision maker at the highest level of review will have the flexibility of accessing the same tools utilized at all other user levels and be able to review an historical generation of information on the particular case or patient.

Applicant Argument No 9:

Applicant states on page 16 with respect to claim 32 that McAndrew fails to disclose "determining the message from the client computer was a reply to a previously generated message from the system, and forwarding the message from the client computer to a representative in response to said determining."

Examiner Response No 9:

Examiner is not persuaded. Applicant is referred to supra examiner's response for claim 1.

Applicant Argument No 10:

Applicant states on page 17 with regard to claim 33 that McAndrew fails to describe "creating a response message based on the message from the client computer, at least one of a

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number of response templates and the selected one or more sets, the system being configured to store the response templates each providing a different response format.”

Examiner Response No 10:

Examiner is persuaded. Supra new art rejection is provided over the combination of McAndrew and Copperman and further in view of Schroeder.

Applicant Argument No 11:

Applicant states on page 17 with regard to claim 34 that McAndrew fails to disclose “scoring the question-answer sets with respect to the question, determining a threshold limit based upon said scoring, and selecting the question-answer sets with scores above the threshold limit.”

Examiner Response No 11:

Examiner is partially persuaded. Supra new art rejection is provided over McAndrew in view of Kohorn and further in view of Iliff.

Applicant Argument No 12:

Applicant states on page 19 with regard to claim 41. “McAndrew as modified in the § 103 rejection still fails to disclose, teach or suggest several features of claim 41. For example, McAndrew fails to disclose ‘Means for determining a message from a client computer was a reply to a previously generated message from a FAQ database and forwarding the message to a representative in response.’ As should be appreciated, this feature is recited in terms of means-plus-function language, and therefore, is entitled to be interpreted under 35 U.S.C. § 112, sixth paragraph.”

Examiner Response No 12:

Examiner is not persuaded. Supra new art rejection is provided over McAndrew in view of Schroeder.

Applicant Argument No 13:

Applicant states on page 22 with regard to claim 27 “McAndrew does not disclose designating one of the question-answer sets to always/never appear in the output of the query input.”

Examiner Response No 13:

Examiner is not persuaded. McAndrew discloses demographic data, defining the problem and a proposed solution which is entered by the user on initial setting up of the user interaction file, col 6, lines 47-52.

Applicant Argument No 14:

Applicant states on page 22 with regard to claim 28, “Nowhere is there evidence, but for the present application that the ordinary skilled artisan would have been motivated to modify McAndrew to never include output for the purpose of confidentiality.”

Examiner Response No 14:

Examiner is not persuaded. McAndrew discloses user overrides proposed treatment and therefore, it will not appear in the output [col 8, lines 1-3].

Applicant Argument No 15:

Applicant states on page 23 with regard to claim 29 “The rejection of dependent claim 29 was improper because no rationale was given to provide the proper motivation to modify McAndrew for ‘proportionally weighting one of the question-answer sets to reduce likelihood of

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appearing in the output for the query input.’ Further, the only possible motivation, if even given, would be through impermissible hindsight.

Examiner Response No 15:

Examiner is persuaded. Supra new art rejection is provided over McAndrew in view of Wu.

Applicant Argument No 16:

Applicant states on page 23 with respect to claim 30 “Likewise, the rejection of claim 30 was improper because no proper motivation was provided that particularly addressed the features recited in claim 30.”

Examiner Response No 16:

Examiner is persuaded. Supra new art rejection is provided over McAndrew in view of Wu.

Applicant Argument No 17:

Applicant states on page 23 with respect to claims 2, 7 and 31 that claims 2, 7 and 31 are separately patentable over McAndrew in view of Mittal.

Examiner Response No 17:

Examiner is persuaded. The rejection in view of Mittal has been withdrawn. Applicant is referred to supra new response where claim 2 is rejected over McAndrew, claim 7 is rejected over the combination of McAndrew and Kavacheri and further in view of Hyodo and claim 31 is rejected over McAndrew in view of Copperman.

Applicant Argument No 18:

Applicant states on page 25 with respect to claims 18, 19 and 25 that the rejection is nonobvious over McAndrew in view of Marchosky.

Examiner Response No 18:

Examiner is persuaded. Supra new rejection is provided. Claims 18, 19 and 25 are rejected over McAndrew in view of Hashiguchi,

Applicant Argument No. 19:

Applicant states on page 27 with respect to claims 21 and 22 that the rejection is nonobvious over McAndrew in view of Ogawa.

Examiner Response No 19:

Examiner is partially persuaded. The rejection of claim 21 over McAndrew is maintained. Claim 22 is rejected over McAndrew in view of Bowman.

Applicant Argument No 20:

Applicant states on page 29 with respect to claims 23 and 42 that the rejection is nonobvious over McAndrew in view of Wu.

Examiner Response No 20:

Examiner is persuaded. Supra new rejection rejects claim 23 over McAndrew in view of Pedersen and claim 42 over the combination of McAndrew and Schroeder in view of Pedersen.

Applicant Argument No. 21:

Applicant states on page 29 with respect to claims 26 and 43 that the rejection is nonobvious over McAndrew in view of Martino.

Examiner Response No 21:

Examiner is partially persuaded. The rejection of claim 26 over McAndrew in view of Martino is maintained while supra new rejection rejects claim 43 over the combination of McAndrew and Schroeder and further in view of Martino.

Applicant Argument No 22:

Applicant states on page 29 with respect to claims 35 and 36 that the rejection is nonobvious over McAndrew in view of Schultz.

Examiner Response No 22:

Examiner is persuaded. Supra new rejection rejects claim 35 over McAndrew in view of Von Kohorn and further in view of Iliff. Claim 36 is rejected under 35 USC § 112 first paragraph.

Applicant Argument No 23:

Applicant states on page 31 that the rejection of claims 37-40 are nonobvious over McAndrew in view of Walker.

Examiner Response No 23:

Examiner is not persuaded. Supra new rejection rejects claims 37-40 under 35 USC § 112 first paragraph and second paragraph.

Applicant Argument No 24:

Applicant argues on page 34 with respect to claims 37 and 38 that the rejection is nonobvious over McAndrew in view of Walker

Examiner Response No 24:

Examiner is not persuaded. Supra new rejection rejects claims 37 and 38 under 35 USC § 112 first paragraph and second paragraph.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne LeRoux whose telephone number is (703) 305-0620.

The examiner can normally be reached on Monday – Friday from 8:00 AM to 4:30 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic, can be reached on (703) 308-1436.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Patent related correspondence can be forwarded via the following FAX number (703) 872-9306

Etienne LeRoux

September 14, 2004


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